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FINDING OF NO SIGNIFICANT IMPACT Laguna Reservoir Restoration Project

U.S. Department of the Interior Bureau of Reclamation Yuma Area Office

In accordance with the National Environmental Policy Act of 1969 (NEPA), as amended, and based on the following, the Bureau of Reclamation (Reclamation) has determined that implementation of Proposed Action (Alternative 1) to dredge areas above Laguna Dam to restore water storage capacity, capture sluicing flows released from Imperial Dam, and maintain the operational integrity of Laguna Dam, would not result in a significant impact on the quality of the human and natural environment. The attached Environmental Assessment (EA) provides details on the Proposed Action and an analysis of potential impacts and should be used as companion document to this Finding of No Significant Impact (FONSI).

The purpose of the Proposed Action is to restore storage behind Laguna Dam from the existing volume of approximately 400 acre-feet (af) to 1,500 af by removing accumulated sediment and nuisance vegetation through dredging along the back of Laguna Dam and Weir and in uplands adjacent to the open water channel of the Colorado River. Additional capacity would be created by dredging approximately 27 acres behind the dam, two large upland areas equal to 88 acres adjacent to the open water channel of the Colorado River, and 34 acres within the existing open water of the Colorado River channel. Habitat restoration at Laguna Reservoir and off-site at Imperial NWR would be included as part of the proposed action to mitigate impacts on wetlands.

The analysis presented in the EA focused on those resource areas identified as potentially impacted by the alternatives considered, including the No Action. Reclamation determined that the potential effects on transportation were negligible and did not conduct further analysis. Reclamation assessed the potential effects on aesthetics, air quality, biological resources, cultural resources, environmental justice, hazards/hazardous materials, hydrology/water quality, Indian Trust Assets, land use, noise, public resources, socioeconomics, topography, geology, soils, and mineral resources. Based on the project's location and nature, Reclamation determined that the project would have no effect on environmental justice issues, Indian Trust Assets, land use, noise, public resources, socioeconomics, topography, and mineral resources. The potential for impacts on aesthetics, air quality, biological resources, cultural resources, hazardous materials, hydrology/water quality, and geologic resources were determined not to be significant because of stringent regulatory and best management practices (BMPs).

Reclamation has identified several BMPs to avoid, minimize, or mitigate adverse effects that may result from the Proposed Action. A brief summary of the environmental commitments and practices Reclamation has committed to are listed below:

- Security and night lighting shall be directed downward and inward through use of standard light shields or hood toward the area to be illuminated, in order to minimize the aesthetic effects of off-site light and glare.
- To ensure that the Proposed Action produces less than significant air quality impacts, Reclamation shall comply with the requirements of Regulation VIII, as outlined in Chapter 3.2 of the EA.
- The Proposed Action is a covered activity under the Lower Colorado River Multi-Species Conservation Program and accompanying biological and conference opinion for Federal covered actions. With incorporation of Avoidance and Mitigation Measures (AMM3 and

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AMM6) and project design components to avoid and minimize impacts on wetlands, the expansion of open water habitat within the project area, and compensatory mitigation for all marsh wetlands affected by the Proposed Action, impacts on wildlife, aquatic areas, and wetlands would be less than significant.

- Project activities within 100 feet of the Laguna Dam shall be monitored by an archaeologist that meets the Secretary of the Interior's professional qualification standards for archaeology.
- Pursuant to Clean Water Act NPDES requirements, a Storm Water Pollution Prevention Plan (SWPPP) shall be in place prior to dredging, pipeline construction, road grading and disposal operations. The SWPPP shall include standard BMPs, such as temporary spill containment booms and absorbent pads, to be utilized in accordance with an established spill contingency plan. In addition, erosion control features such as straw wattles, silt fences, revegetation, minimization of grading (to the extent practicable), construction of surface water velocity reducers, and installation of erosion control barriers around stockpiled soil. Such measures shall be implemented in accordance with an established erosion control plan.

Based on analysis of the environmental impacts, BMPs, and environmental commitments, as presented in the EA, Reclamation has concluded that implementation of the Proposed Action (Alternative 1) does not pose a significant adverse impact to the quality of the human and natural environment.

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Yuma Area Office

Date

Executive Summary

This Environmental Assessment (EA) describes the potential environmental consequences resulting from a proposal by the United States (U.S.) Bureau of Reclamation (Reclamation) to dredge areas above Laguna dam in order to restore water storage capacity, capture sluicing flows released from Imperial Dam, and maintain the operational integrity of Laguna Dam. Reclamation has prepared this EA in accordance with the National Environmental Policy Act of 1969 (NEPA), 42 United States Code (U.S.C.) §§ 4321-4370d, as implemented by the Council on Environmental Quality (CEQ) regulations, 40 Code of Federal Regulations (CFR) Parts 1500-1508 and the guidelines contained in the United States Department of the Interior Bureau of Reclamation Draft NEPA Handbook (Reclamation 2005a).

Purpose of and Need for the Proposed Action

Laguna Dam is located approximately 12 miles northeast of Yuma, Arizona, and five miles downstream from Imperial Dam, on the border of California and Arizona. The reservoir storage area is located within the existing floodplain of the Colorado River that is currently bound by Imperial Dam on the north side, Laguna Dam on the south side, Mittry Lake and the Old River Channel on the east side, and the Laguna Desilting Basin on the west side.

The Laguna Reservoir's original storage capacity was approximately 1,500 acre-feet (af). However, the reservoir has not been dredged since the late 1970's due to space clearing events that occurred in the interim. Since then, the capacity of the reservoir has been reduced to approximately 400 af.

About 300-400 af of water is released by Imperial Dam during each sluicing event to move sediment collected by the Imperial desilting works through the California Sluiceway to the Laguna Settling Basin. This water is retained by Laguna Dam within the Laguna Reservoir. Operating requirements for the Imperial Dam facilities requires sluicing operations or mechanical removal of approximately two to three times a week. Presently, the storage capacity of Laguna Reservoir is barely sufficient to retain a single sluicing flow from Imperial Dam. Thus, Reclamation is limited to performing a sluicing event not more than once per week due to operational constraints. This approach has proven to be insufficient, and accumulated sediment below Imperial Dam is not completely removed. As a result, the residual sediment compacts over time, and requires increasing amounts of water to move the accumulated sediment during subsequent sluicing operations.

In addition to affecting the ability to store sluicing flows, accumulated sediment above Laguna Dam has resulted in nuisance vegetation growth near hydraulic features, which compromises the operational function of the reservoir and the structural integrity of the Dam. Nuisance vegetation has also grown across a significant portion of the Laguna Dam weir. Vegetation upstream of the

weir adversely affects the structural integrity of the weir and has blocked roughly two thirds of the structure's concrete outlet structure.

The purpose of the proposed dredging is to provide increased water storage capacity behind Laguna Dam to capture sluicing flows released from Imperial Dam and to maintain the operational integrity of Laguna Dam. This action would achieve the desired functional improvements to the reservoir and maintain the historic integrity of Laguna Dam and also avoid as much of the existing wetlands as possible.

The need for the proposed action is related to the removal of accumulated sediment in the Laguna Reservoir, which has reduced storage capacity.

Description of Alternative 1 — 1,500 Acre-Feet Storage Reservoir with Reduced Wetland Impact (Proposed Action)

Alternative 1, the proposed action, would restore storage behind Laguna Dam from the existing volume of approximately 400 af to 1,500 af by removing accumulated sediment through dredging along the back of Laguna Dam and weir and in uplands adjacent to the open water channel of the Colorado River. The proposed action would include the removal of accumulated sediment and nuisance vegetation from a large segment of the weir, which would allow the California side of the weir to function as originally designed. Additional capacity would be created by dredging approximately 27 acres behind the dam, two large upland areas equal to 88 acres adjacent to the open water channel of the Colorado River, and thirty-four acres of open water. See Figure ES-1.

Habitat Restoration at Laguna Reservoir and off-site at Imperial NWR would be included as part of the proposed action to mitigate impacts on wetlands through:

- avoidance measures included as part of the Proposed Project;
- planned natural wetland establishment of 3.23 acres within the expanded Laguna Reservoir (Figure ES-2);
- restoration of wetlands for a net gain of 2.00 acres within expanded ponds at the Imperial National Wildlife Refuge (NWR); and
- creation of 1.99 acres of wetlands in an upland area at the Imperial NWR.

The proposed action is a covered activity under the Lower Colorado River Multi-Species Conservation Program (LCR MSCP). The LCR MSCP is an authorized and permitted conservation program under the Federal Endangered Species Act (ESA) and the California Endangered Species Act (CESA). All LCR MSCP requirements would be implemented to address impacts of the Project, and the LCR MSCP conservation measures are incorporated by reference into the Environmental Assessment.